



ATTACHMENT A

1. (Currently Amended) Butene-1 copolymers ~~having~~ comprising a content up to 40% by mol of at least one comonomer, the comonomer being selected from ~~[[of]]~~ ethylene, ~~[[and]]~~ propylene, and mixtures thereof ~~derived units, the butene-1 copolymers further comprising:~~ characterized by the following properties:

- a) a product of the reactivity ratios  $r_1 \cdot r_2 \leq 2$ ;
- b) a content of butene-1 units in form of isotactic pentads (mmmm) > 98%; and
- c) an absence of 4,1 insertions of butene units.

2. (Currently Amended) The butene-1 copolymers according to claim 1, wherein ~~in which~~ the content of (mmmm) is >99% and the reactivity ratio  $r_1 \cdot r_2 \leq 1$ .

3. (Currently Amended) The butene-1 copolymers according to claim 1, wherein ~~[[a)]]~~ the reactivity ratio  $r_1 \cdot r_2 \leq 1.5$  ~~[[;]]~~ and the content of butene-1 units in the form of isotactic pentads (mmmm) > 98.5.

4. (Currently Amended) The butene-1 copolymers according to claim 3 further comprising ~~having~~ a PI ranging from ~~in the range~~ 3-10.

5. (Currently Amended) The butene-1 copolymers according to claim 1, wherein the content of the at least one comonomer ~~of ethylene and propylene derived units~~ ranges from 0.1 to 35% by mol.

6. (Currently Amended) The butene-1 copolymers according to claim 5, wherein the content of the at least one comonomer ~~of ethylene and propylene derived units~~ ranges from 0.5 to 30% by mol.

7. (Currently Amended) The butene-1 copolymers according to claim 6, wherein the at least one comonomer is ethylene.

8. (Currently Amended) The butene-1 copolymers according to claim 6, wherein the at least one comonomer is propylene.

9. (Currently Amended) The butene-1 copolymers according to claim ~~[[6]]~~ 1, wherein the content of the at least one comonomer ~~ethylene or propylene~~ is lower than about 3% by mol.

10. (Currently Amended) The butene-1 copolymers according to claim 6, wherein the content of the at least one comonomer ranges from ~~of ethylene and propylene is in the range of~~ 2-15% by mol.

11. (Currently Amended) The butene-1 copolymers according to claim ~~[[6]]~~ 1, wherein the content of the at least one comonomer ~~ethylene or propylene derived units~~ is at least 12% by mol.

12. (Currently Amended) The butene-1 copolymers according to claim 11, wherein ~~in which~~ the comonomer is ethylene.

13. (Currently Amended) The butene-1 copolymers according to

claim 11, wherein the butene-1 copolymers ~~characterized by the fact that they~~ do not show a melting point at the thermal analysis.

14. (Currently Amended) A polymer composition comprising: (A) from 1 to 99wt % of a butene-1 copolymer ~~having~~ comprising a content up to 40% by mol of at least one comonomer, the comonomer being selected from [[of]] ethylene, [[and]] propylene, and mixtures thereof ~~derived units, the butene-1 copolymers further comprising: characterized by the following properties:~~

- a) a product of the reactivity ratios  $r_1 \cdot r_2 \leq 2$ ;
  - b) a content of butene-1 units in form of isotactic pentads (mmmm) > 98%; and
  - c) an absence of 4,1 insertions of butene units;
- and (B) from 1 to 99% of another polymeric component the said percentages being referred to the sum of (A) and (B).

15. (Currently Amended) The polymer composition according to claim 14, wherein ~~in which~~ the component (B) comprises an olefin (co)polymer.

16. (Currently Amended) The polymer composition according to claim 14, wherein ~~in which~~ the component (B) is an ethylene containing (co)polymer, a propylene containing (co)polymer, or mixtures thereof ~~or their mixtures~~.

17. (Currently Amended) A polymer composition comprising:

- (A) from 5 to 40wt of butene-1 copolymers ~~having~~ comprising from 1 to 15% by mol of ethylene, [[or]]

propylene, or mixtures thereof, the butene-1 copolymers further comprising ~~characterized by the following properties:~~

- a) a product of the reactivity ratios  $r_1 \cdot r_2 \leq 2$ ;
- b) a content of butene-1 units in form of isotactic pentads (mmmm) > 98%; and
- c) an absence of 4,1 insertions of butene units; and

(B) from 60 to 95%wt of a propylene copolymer comprising ~~containing~~ from 1 to 30 % by mol of at least one comonomer, the comonomer being selected from ~~from~~ [[of]] ethylene and an  $\alpha$ -olefin of formula  $\text{CH}_2=\text{CHR}$ , wherein R is a  $\text{C}_2\text{-C}_{10}$   ~~$\text{C}_2\text{-C}_{10}$~~  hydrocarbon group.

18. (Currently Amended) The polymer composition according to claim 17, wherein ~~in which~~ said  $\alpha$ -olefin is butene-1.

19. (Currently Amended) The polymer composition according to claim 17 ~~[[18]]~~, wherein ~~in which~~ the component (B) is selected from either (a) a propylene copolymer comprising both ~~containing~~ ethylene and butene-1, wherein the content of ethylene is from 1 to 10% by mol and the content of butene-1 is from 1 to 10% by mol, or (b) a propylene copolymer containing from 2 to 15% by mol of butene-1.

20. (Currently Amended) A polymer composition comprising: (A) a butene-1 copolymer comprising ~~having~~ a content up to 40% by mol of at least one comonomer, the comonomer being selected from ~~from~~ [[of]] ethylene, [[and]] propylene, and mixtures thereof ~~derived units,~~ the butene-1 copolymers further

comprising: characterized by the following properties:

- a) a product of the reactivity ratios  $r_1 \cdot r_2 \leq 2$ ;
- b) a content of butene-1 units in form of isotactic pentads (mmmm) > 98%; [[and]]
- c) an absence of 4,1 insertions of butene units [[,]] ;  
and
- d) not showing a melting point; and

(B) a butene-1 copolymer comprising having a content up to 40% by mol of at least one comonomer, the comonomer being selected from [[of]] ethylene, [[and]] propylene, and mixtures thereof derived units, the butene-1 copolymers further comprising:  
characterized by the following properties:

- a) a product of the reactivity ratios  $r_1 \cdot r_2 \leq 2$ ;
- b) a content of butene-1 units in form of isotactic pentads (mmmm) > 98%; [[and]]
- c) an absence of 4,1 insertions of butene units; and  
[[,]]
- d) showing a melting point.

21. (Currently Amended) The polymer composition according to claim 20, wherein in which (A) is a butene-1/ethylene copolymer comprising having a content of ethylene of higher than 10% by mol; and (B) is a butene-1/ethylene copolymer comprising having a content of ethylene of less than 10% by mol.

22. (Currently Amended) A polymer composition comprising:

- (i) from 5 to 25% wt of a butene-1 copolymer having comprising a content up to 40% by mol of at least one comonomer, the comonomer being selected from

[[of]] ethylene, [[and]] propylene, and mixtures thereof derived units, the butene-1 copolymers further comprising: characterized by the following properties:

- a) a product of the reactivity ratios  $r_1 \cdot r_2 \leq 2$ ;
  - b) a content of butene-1 units in form of isotactic pentads (mmmm) > 98%; and
  - c) an absence of 4,1 insertions of butene units;
- and
- (ii) from 75 to 95wt of an ethylene polymer; said percentages being based on the sum of (i)+(ii).

23. (Currently Amended) Manufactured articles obtained from a composition comprising at least one butene-1 copolymer having comprising a content up to 40% by mol of at least one comonomer, the comonomer being selected from [[of]] ethylene, [[and]] propylene, and mixtures thereof derived units, the butene-1 copolymers further comprising: ~~characterized by the following properties:~~

- a) a product of the reactivity ratios  $r_1 \cdot r_2 \leq 2$ ;
- b) a content of butene-1 units in form of isotactic pentads (mmmm) > 98%; and
- c) an absence of 4,1 insertions of butene units.

24. (Currently Amended) A process for preparing butene-1 copolymers having comprising a content up to 40% by mol of at least one comonomer, the comonomer being selected from [[of]] ethylene, [[and]] propylene, and mixtures thereof derived units, the butene-1 copolymers further comprising: ~~characterized by the following properties:~~

- a) a product of the reactivity ratios  $r_1 \cdot r_2 \leq 2$ ;

b) a content of butene-1 units in form of isotactic pentads (mmmm) > 98%; and

c) an absence of 4,1 insertions of butene units,

the process comprising copolymerizing butene-1 and at least one comonomer, the comonomer being selected from ethylene, propylene, and mixtures thereof, of ethylene and propylene in ~~[[the]]~~ presence of a stereospecific catalyst comprising (A) a solid catalyst component comprising a Ti compound and an electron-donor compound selected from phthalates, supported on  $MgCl_2$ ; (B) an alkylaluminum compound; and~~[[,]]~~ (C) an external electron-donor compound of formula  $R_a^5 R_b^6 Si(OR^7)_c$ , wherein a and b are integers from 0 to 2~~[[,]]~~; c is an integer from 1 to 3 and the sum (a+b+c) is 4; and  $R^5$ ,  $R^6$ , and  $R^7$ , are alkyl, cycloalkyl or aryl radicals with 1-18 carbon atoms optionally comprising at least one heteroatom containing heteroatoms.

25. (Currently Amended) The process according to claim 24, wherein the external donor is hexyltrimethoxysilane.

26. (Currently Amended) The process according to claim 24, wherein the process is carried out in liquid butene-1.

27. (Currently Amended) The process according to claim 26, wherein in-which the process co-polymerization is carried out in at least two reactors working under different reaction conditions.